

**MNCs' Ownership Advantage, Developing Countries,  
And New Regionalism\***

**(Research Paper Submitted for Ford Foundation Program 2004-2005)**

Zhao Jianglin, Ph. D.

Associate Research Fellow  
Institute of Asia-Pacific Studies  
Chinese Academy of Social Sciences

[fbeijing@263.net](mailto:fbeijing@263.net)

Visiting Scholar

School of Business

Columbia University

[jz2126@columbia.edu](mailto:jz2126@columbia.edu)

## **Abstract**

Since the mid-1980s, more regional trade arrangements (RTAs) have arisen between developing and developed countries than before. The evidence shows that MNCs are the major driving force of the new regionalism. The puzzle presented in this paper is why MNCs would like to propel new RTAs between developing and developed countries. The paper believes that the emergence and development of new regionalism is, to a great extent, related to the situation that MNCs wish to enter into developing countries' markets. However, it is not easy for MNCs to access to this developing market. MNCs still have to be faced with challenges brought about by both their more and more public-good-like ownership advantages and the increasing cost of producing ownership advantages. If MNCs did not extend their market to the developing countries, they would not spread the cost of producing ownership advantages. However, if they did, they would face the risk that their property of public goods is freely ridden by developing countries due to no effective intellectual property protection (IPP). Therefore, MNCs have to produce much demand for building up new RTAs including developing countries to protect their ownership advantages, especially when they meet the difficulties in multinational negotiation in IPP.

With regard to the case of East Asian region, East Asian production pattern of the vertical division of labor or a production base leads to low extent of regional marketization and also demands little for regional institutionalization, at least from the demand perspective of regional integration. In East Asia, Japan has been keeping the highest level of industrial technologies while other East Asian members still in the phase of "learning" rather than innovation, or still technology-dependent economies. Due to lack of common interest, especially in IPP, there is not a real example of new regionalism in East Asia. East Asia needs to resolve some regional structural problems such as transforming the economic structure from the production base to the market; establishing the regional market institution and encouraging innovative activities. Some good signs have shown changes in regional structure such as China emergence as a rising market, accumulation of ownership advantages in East Asian firms from developing economies and improvement of Japanese technological transfer. With the transformation of regional structure, new regionalism in East Asia would like to arise in the future.

## **Content**

## **I. Two Famous phenomena**

1. New Development of Regionalism since 1980s
2. Development of MNCs since 1980s

## **II. Effects of MNCs on New Regionalism**

## **III. MNCs' Ownership Advantages and Developing Countries**

1. Change of MNCs' Ownership Advantages
2. Limits of MNCs' Internal Market
3. Difficulties in Multinational Negotiation on IPP
4. Shift to RTAs

## **IV. The Case of East Asia**

1. Slower Regionalism than Regionalization
2. Characteristics and Impact of East-Asian Regionalization
3. Regional MNCs' Demands for RTAs: as an Example of IPP
4. The Future of Regionalism in East Asia

## **V. Conclusion**

**MNCs' Ownership Advantage, Developing Countries,  
And New Regionalism**

By Zhao Jianglin

Since the mid-1980s, more regional trade arrangements (RTAs) between developing and developed countries have arisen than before. If we explain this phenomenon within the framework of old regionalism, we have to meet some difficulties. For example, why did these RTAs (between developing countries and developed countries) seldom take place in the past? In order to explain it, new variables must be considered. Now that RTAs have been made between countries, transnational factor should be first considered. Till now, one of the most important, or essential transnational forces in the area of international political economy are multinational corporations (MNCs). The contribution of MNCs to new regionalism has caused much research. Based on the supply and demand model of regionalism, Mattli argued that old regionalism was a product supplied and demanded by states while new regionalism is the result of both the demand of the market force, especially big businesses and the supply of the governments,[1] which shows that MNCs become the major driving force of the new regionalism.

The puzzle presented in this paper is why MNCs become a driving force to forge these new RTAs between developing and developed countries in the stage of new regionalism. As will be shown in the paper, the study on the demand for regionalism is focused, based on the theory of firm trade preference. However, unlike other research, this paper will argue that ownership advantage of MNCs is an essential factor, which leads MNCs to demand for new regional policy and hence promote the emergence and development of these new RTAs.

This paper includes five sections. The first section presents the background of the study. The second section overviews the literature of the effects of MNCs on new regionalism. The third section provides some explanation why MNCs demand for regional integration, especially RTAs between developing and developed countries. The forth section is to apply the framework to the process of the East-Asian regional integration. The fifth section is the conclusion.

## **I. Two Famous phenomena**

### **1. New Development of Regionalism since 1980s**

No matter what we define regionalism,[2] it has enjoyed two climaxes for the recent fifty years. The first regionalism, called “old regionalism,”[3] started in West Europe, Latin America and Africa in the 1950s when the beginning of the Cold War appeared, and ended in 1970s. For example, the Treaty of Rome, born in 1958, was formulated by major regional countries such as French

and West German in order to keep regional peace. Starting from the 1980s, particularly in the early 1990s, regionalism entered into a new phase of development, which called “new regionalism”. More and more countries joined various schemes of regional integration, and moreover, various kinds of regionalisms, formal or informal, institutional or non-institutional, spread all over the world, particularly in West Europe, North American and Asia-Pacific regions. Up to December 2002, about 250 RTAs have been notified to the GATT/WTO, of which 130 were notified after January 1995. Now there are over 170 RTAs being in force and an additional 70 are estimated to be operational in spite of not being notified yet. By the end of 2005, it is estimated that the total number of RTAs in force might well amount to 300.[4] It seems that no sign appears that this process of new regionalism will stop in the near future (See Chart 1).

Chart 1 Evolution of RTAs in the world, 1948-2002

Number of RTAs

Source: www.wto.org

Compared with old regionalism, one of characteristics of new regionalism is that a lot of recent RTAs have been established between developing countries and developed countries (See table 1).[5] Such RTAs are shown in the enlargement of EU, the establishment of NAFTA and the emergence of APEC. It is well known that the participants of the old regionalism usually had a similar level of economic development while those of the new regionalism are very “mixed” and participants of different level of economic development and different economic scale could join the same RTA[6]. Hettne pointed out that “even the core regions contain their own centre-periphery or North-South Cleavages.”[7] Of course, not all developing countries are linking up with developed countries but those who are neighbors of developed countries or who are of great significance to developed countries join RTAs suggested by developed countries.

Table 1: the number of RTAs currently in force with developing countries, 2003

Country or region	Number of regional trade agreements		
	Total in force	With developing country partners	With developing country partners, formed since 1989
United State	4	3	3
European Union	50	35	31
Canada	5	4	4
Japan	2	0	0
Australia and New Zealand	4	0	0

European Free Trade Area	24	21	17
Agreements between developing country partners	76	76	68
Other	19	-	-
Total	184	139	123

Note: NAFTA is included for both the U.S. and Canada.

Source: Mary E. Burfisher; Sherman Robinson, and Karen Thierfelder, "Regionalism: Old and New, Theory and Practice", MTID Discussion Paper NO. 65. Feb., 2004. [Http:// www. lfpri.org](http://www.lfpri.org).

Why are there so many RTAs between developing and developed countries since the 1980s?  
How do we explain the phenomenon?

## 2. Development of MNCs since 1980s

Before the end of Cold War, transactional forces including MNCs and NGOs have begun to play an increasing role in the international economic and political activities. In the field of international political economy, some studies concluded that the relationship between the market and the state has changed dramatically before or after the end of Cold War: the market forces have not been confined within one country and have broken through the national boundary and spread regionally, and even globally. Among the market forces, the most salient is MNCs.

From the beginnings of 1970s, MNCs have become an important economic power in the world in terms of various economic indicators. In 1970, there were some 7,000 parent TNCs. Today the total number of parent TNCs is at least 61,000 with over 900,000 foreign affiliates.<sup>[8]</sup> Both FDI by MNCs and growth of total assets of foreign affiliates show the change in MNCs' economic power (See Chart 2 and 3). Till now the economic power of MNCs has gone beyond that of states. For example, the gross production of MNCs' foreign affiliates (US\$3706 billions) is about equal to the volume of import (US\$ 3772 billions) of the first seven leading countries (U.S., Germany, China, U.K., France, Japan, and Italy) or more than the volume of export (US\$ 3659 billions) of the first eight leading countries (Germany, U.S., Japan, China, France, U.K., Netherlands and Italy) in 2003. Usually annual value of production by a large-scaled MNCs exceeds GDP of an average developing country during the whole year. MNCs' economic activities have spread into every corner of the world and integrated the world economies into an unhistorical interdependent state. Of course, the distribution of MNCs in the world is unbalanced (See table 2). MNCs are mainly concentrated in the economically developed region, such as EU, U.S. and Japan.

Chart2 FDI inflows, global and by group of countries, 1980-2003 (Billions of dollars)

Source: World Investment Report, UNCTAD, 2004, P3.

Chart 3 Total assets of foreign affiliates: value at current prices (Billions US\$)

Source: World Investment Report 2003

Table 2 Transnational Corporations - Number and Location , 1997

Region	Parent Corporations Based in Region	Foreign Affiliates Based in Region
World	53,607	448,917
Developed Economies	43,442	96,620
Developing Economies	9,323	230,696
European Union	27,846	54,875
United States	3,379	18,901
Japan	4,231	3,014
China	379	145,000
Latin America	1,109	21,174
Africa	32	330

Source: World Investment Report, UNCTAD 1998.

As early as in 1970s, MNCs have been regarded as one of “new actors” in the world economy.[9] Nye argued that the rise of the MNCs have been particularly significant from the second half of the 20<sup>th</sup> century due to their scale, their direct effect on relocation of production, their flexibility in response to a central strategy (which weakens government controls), and their effect on other transnational actors such as labor union, bank and others who have to follow the lead of MNCs.[10] Servan-Schreiber also described the overwhelming power of the modern international firms.[11] Jones applied the term “global business actors” to private corporate actors that control operations or income-generating assets in more than one country, i.e. MNCs.[12]

Due to their economic power, MNCs become new “authority” of changing international political economy. Ruigrok pointed out that since the second half of the 1980s their importance has increased dramatically so that their economic activities are more and more beyond control by governments.[13] Sampson contended that MNCs “have grown up outside the framework of the nation itself.”[14] Under embedded liberalism, the state is actually a “retreat” from the market,[15] or a “withering away of the state.”[16] Ohmae argued that market forces such as TNCs increasingly become important sources of authority in the global political economy, both in

the domestic, regional and global realm.[17] Ruigrok again contended that leaders of MNCs do not only have “visions” of organizing economic activities, affecting external actors, but also have political visions; and it is omission to consider them as actors basically being engaged in economic transactions, as “masters of the market”. [18] Some political scientists found that it is too restricting only to focus the study on the nation-state and developed an alternative model that includes MNCs as actors in world politics.[19] George Modelski wrote that “Corporation are an important part of present and future international systems and, even though we need not think of them as becoming governmental organizations in their own right, their political functions as structural components of systems of world politics can be neglected at our peril.”[20] In summary, new regionalism’s appearance must be attributed to new factor --- MNCs, or we could not distinguish between old and new regionalism and could not explain why new regionalism developed so fast. As Robert Z. Lawrence notes, The forces driving the current developments differ radically from those driving previous waves of regionalism in this century. Unlike the episode of the 1930s, the current initiatives represent efforts to facilitate their members’ participation in the world economy rather than their withdrawal from it. Unlike those in the 1950s and 1960s, the initiatives involving developing countries are part of a strategy to liberalize and open their economies to implement export-and foreign-investment-led policies rather than to promote import substitution.[21]

## **II. Effects of MNCs on New Regionalism**

In much literature, there existed study on the relationship between MNCs and regionalism. Robson argued that “the relationship between cross-border business integration through operations of TNCs and regional integration is an intimate one.”[22] This paper discusses mainly effects of MNCs on RTAs, not the reverse; therefore the literature will be overviewed in this aspect.

Before or in the 1970s, there has not existed a basic conclusion on effects of MNCs on regionalism although their effects have been noted. Before 1970s, some authors pointed out those MNCs beyond national boundaries helped make the Treaty of Rome an economic reality.[23] Similarly, “Within the Latin American Free Trade Zone foreign firms, such as IBM, Olivetti, and Ford, show greater integration zeal than most domestic entrepreneurs.”[24] However, the conclusion of research in the 1970s is very vague on the role of MNCs in regional integration since there is no or seldom direct evidence to show that MNCs strengthen “process forces” and improve conditions of integration or disintegration responded by national governments. Nye concluded that MNCs are maybe a potentially important machine of integration and at the same time, extra-regional enterprises may weaken some forces and



worsen some conditions—primarily distributive equity ones.[25] MNCs have not appeared in the analyses of regionalism processes largely due to the fact that “global business basically rose to prominence in the 1970s when the ‘first wave’ of regionalism had already come to an end.”[26] Until about the mid-1980s, it is begun to note that the European MNCs stressed more on the European continent and lobbied more for a European regionalism than before.[27]

In the mid-1980s, it is increasingly obvious that MNCs have risen to a major driving force behind the regionalism, which caused much concern in the academic area. Cerny contended that “in attempting to adapt to a range of complex changes in cultural, institutional and market structures, both political and market actors are increasingly seeking, directly or indirectly, wittingly or unwittingly, to reinvent political structures and institutions in a wider global context.”[28] Mattli constructed a model of successful regional integration where there are two sets of conditions must be satisfied if integration is to succeed, namely, demand-side and supply-side conditions. The supply-side condition is from the political leaders in the region to engage in particular courses of action to realize the economies of their countries closer together. The demand comes from “the bottom, that is, market actors who stand to reap large gains from transacting in increasingly integrated economies. This demand for regional rules, regulations, and policies is a crucial driving force of integration”.[29] Weintraub also argued that the simplest economic explanation is that regional institutes follow underlying trade and investment flows; the deeper these flows, the greater the demand for regional institutes to manage them[30].

The evidence also showed the driving role of MNCs in building up new regionalism. An increase in MNCs’ lobbying activities at the international level, mainly done by business associations, brought about the strong pressure for common rules and external safeguards. More and more “official positions” of firms and business associations appeared in the domestic political structure or regional institutions.[31] Take examples. All of the major American umbrella organizations,[32] representing the interests of American corporations, expressed support for deeper integration in North American[33] and become the crucial political force behind NAFTA. Even in the Asia-Pacific region where till now there has never been institutional building, there still existed a Business Advisory Council to present their suggestions on the regional cooperation to the regional political leaders. In fact, to a great extent, without efforts of the regional MNCs from Japan, U.S. and other economies, it is almost impossible to build a regional organization --- APEC in such a diverse region of different level of economic development, different political, social and cultural structure. Urata summarized the role of Japanese FDI in linking together East-Asia, such as know-how spillovers, building sale and procurement and information networks to connect the members of East-Asia and promote intra-regional trade.[34] As for EU that has a historical tradition of regional integration, the role of MNCs in enlarging EU and deepening

European integration from the comprehensive economic to political cooperation can not be neglected even. Malti argued that the “re-launching” of European integration in the mid-1980s is in great part attributable to pressure from the business community. European industrialists were the first to campaign for a single European market at a time of rapid technological change, even before the EC[35]. The European Round Table (ERT) of European industrialists, formed in 1983, a group comprising Europe's largest and most influential corporations, became a powerful lobby vis-à-vis the national governments. In one of their first meetings, the members of ERT concluded that “in reality, despite ambitions to liberalize trade, and the measures taken by the EEC, Europe remains a group of separate national markets with separated national policies and separated industrial structures. This prevents many firms from reaching the scale necessary to resist pressure from non-European competitors.”[36]Thomsen argued that based on the data of regional trade and FDI, the growing regional integration that we observe, orchestrated in large part by MNCs, is a natural result of geographical and cultural proximity, not the outcome of political negotiations.[37]

Why do MNCs pursue a regionalized policy? Globally operating MNCs should be for a multilateral trading system due to an increasing interest in the global economy. But since the mid-late 1980s they are also more and more concerned about regional arrangements which always have a feature of closing to the economies outside to a different degree and diverting principles of the liberalizing trading order. It seems a paradox.

According to the standard economic analysis, for firms in perfectly competitive markets, the welfare-maximizing outcome is free trade globally rather than other trade policy, including domestic protection or regional trade preferable arrangements. Therefore, MNCs prefer freer trade policy to trade barriers, which is proved by Helen Milner.[38] She argued that firms of international ties other than domestic firms intend to resist protection even in the economic distress. Along this line of research, MNCs, as firms of globally production and sale networks, would help build up not regional trade arrangements or domestic protection but a globally free trade system. Hillman and Ursprung also concluded that “increased multinational presence has a liberalizing influence on the determination of international trade policy—evidently via the incentives for free trade deriving from international vertical integration, and also—perhaps less evidently but as our model demonstrates—when multinational operation takes the form of horizontal integration.”[39]

However, Robson argued that within the framework of orthodox theory, there is no scope for a formal analysis of the interaction between regional integration and MNCs, since firms, ownership internalization considerations are entirely disregarded. Burfisher, et, pointed out that

characteristics of new regionalism need a new and comprehensive framework. In their explanation of development of new regionalism, almost all of analyses are pointed to economic activities related to MNCs.[40] Since the 1980s, the new development of theories of both trade and industrial organization has opened the way to a systematic consideration of the regional integration and MNCs.[41] The new theory of international trade shows that the market is not perfect, the scale economy is not constant but increasing, so MNCs trade gain may come from the imperfect market structure, that is, increasing scale of economy is one part of gains MNCs can get. MNCs of different nature have different trade preference demand. Milner argued that firms lacking scale economies or with constant returns to scale would prefer export-oriented (Multilateral trade liberalization) or import-competing (home protection) while firms with increasing returns to scale (IRS) should be the ones who pursue regional strategy.

In her later paper, Milner argued that as industries have become increasingly global and government intervention more pervasive, corporate trade demands have moved away from the standard poles of free trade and protectionism toward a more complex response, called strategic trade policy.[42] Changing market conditions and government policy make corporate trade demand from unconditional in favor of free trade policy to conditional in favor of free trade policy or in favor of protectionism or strategic trade policy. Therefore it is obvious that MNCs do not always pursue multinational trade preferable arrangements although MNCs would treat free trade as their first best option.

In fact, to a great extent, new regionalism reflected MNCs' responses to accessing not only to the developed markets but also to the newly emerging markets of developing countries. As we know, MNCs have been speeding the process of regionalization since the 1980s. Das argued that MNCs require complete harmonization of other policies including competition policies, product standards, regulatory regimes, investment codes, environmental policies.[43] This seldom appeared in old regionalism provided by governments because governments have played a limited role in the economic activities and therefore could not demand so much for common rules and standards. Cutler et al argued that it is individual firms that are establishing international framework for their economic activities, now captured with the concept of "international private authority", as a market-oriented source of authority. The setting up of private sector regimes creates areas of rule-making, standards-setting and organization of industrial sectors.[44] Therefore RTAs of new regionalism have been involved "deep integration" or having more developing countries joining the RTAs and enacting common standards or rules with the developed countries: the partners seldom confine themselves to reducing or eliminating trade barriers, but also harmonize or adjust diverse assortments of other economic policies.[45] The EU is a clear and dramatic example of this change. In 1997, early voluntary sectoral liberalization

(EVSL) in APEC has been ever suggested. As summarized by Burfisher et al,[46] new regionalism includes the following items (1) facilitating factors such as capital flows and labor movement; (2) harmonizing domestic policies such as tax and subsidy policies and harmonizing macroeconomic policies; (3) establishing institutions to manage and facilitate integration such as regional development funds, institutions to set standards, and dispute resolution mechanisms; (4) improvement of communications and transportation infrastructure to facilitate increased trade and factor mobility and harmonizing legal regulation of product and factor markets.

Compared with old regionalism, the welfare from new regionalism is multi-dimension and is larger than those brought about by old regionalism since MNCs demand stricter requirements of the market along with their economic activities deepening. According to the study conducted by EU, it shows that the resource allocation benefits from reduced internal trade barriers are indeed small, even allowing for the liberalization of public procurement decisions which remain a major source of national preference; of roughly equal importance are the three other components, that is elimination of internal cost-increasing restrictions such as excessive regulations, fragmented standards, and border controls; greater competition arising from the integration of segmented imperfectly competitive markets and scale economies.[47] As Spindler put forward, the market logic in new regionalism is in essence a matter of competitiveness and openness, promoting the imperatives of deregulation, privatization and restriction of public intervention in economic process. To some degree, global business circles advocate a specific type of a regionalized world (while at the same time promoting a transnational, globalizing economic system). In this process, regionalism becomes “infused” with the logic of the market inherent in the concepts and ideas of globalizing forces and a “Marketisation” of the region appeared. These “Market concepts” of regionalism keep on “fighting” and competing with prevailing older protectionist concepts inherent in old style regionalism and in the long run might transform them into new regional structure.[48]

Roughly speaking, some literature has provided effects of MNCs on new regionalism. But there is seldom explanation on cooperation between developing and developed countries by using the variable of MNCs. This paper tries to do this and believes that ownership advantages of MNCs are facing increasing challenges from two aspects. One is that their ownership advantages are more and more of public goods while the other is that the cost of producing ownership advantages is going up increasingly. If MNCs do not extend their market to the developing countries, they will not reduce the cost of producing ownership advantages. However, if they do, they will face the risk that their property of public goods is freely ridden by developing countries. Due to the multilateral difficulties, MNCs have to produce much demand for building up new RTAs including developing countries to protect their ownership advantages.

### III. MNCs' Ownership Advantages and Developing Countries

#### 1. Change of MNCs' Ownership Advantages

That MNCs have become multinational firms is because MNCs have their specific ownership advantage which seldom belongs to other kinds of firms such as domestic firms or export-oriented firms to help them operate well in host countries. In Dunning's OLI electric paradigm, ownership-specific advantage is one of MNCs' three advantages to producing abroad rather than at home. Jorstmann and Markusen also concluded that "ownership advantages are a crucial determinant of multi-nationality."<sup>[49]</sup> With the advancement of technology, this kind of most important or essential asset has changed from tangible such as capitals to intangible such as intellectual assets (See table 3). Dunning has further cataloged two kinds of intangible assets in terms of relevance to internalization. One is unessential to be internalized such as most patents and trademarks, and some management marketing, financial and organizational assets. The other is essential to be internalized within the firm and not saleable to other firms. This includes the genuine joint economies of hierarchical activities, for example, product and process integration, the spreading of managerial and technological capacity, the reduction in transaction costs and the gains arising from asset, product or market diversification.<sup>[50]</sup>

Till now, intangible assets have become the source of both core competence and profits for MNCs. Dunning argued that the competitive advantages of a country's enterprises in serving foreign markets is determined both by firms' ownership advantages, relative to those of enterprises of other nationalities, and the location advantages of the countries where they produce, relative to those of other countries.<sup>[51]</sup> Compared with host countries, especially the developing countries, MNCs have not owned low cost of physical capital or labor. The main or even only ownership advantage of MNCs is intangible assets. The large empirical literature on MNCs repeatedly found that MNCs are associated with the existence of knowledge-based, firm-specific assets. The evidence shows that an industry tends to have a greater proportion of MNCs when the output of that industry is characterized by R&D, marketing expenditures, scientific and technical workers, product newness and complexity, and product differentiation. At an abroad level, MNCs are identified with a high ratio of intangible assets of the firm to its total market value.<sup>[52]</sup>

Table 3 Changing characteristics of assets

	Specific to ownership	Accessed by firms	Organized by firms
Pre	•Land, property	•Labor, materials	•Internal to households

industrial revolution			•Elementary markets
	(mainly domestically created sourced and utilized)		
Nineteen and twentieth centuries	•Machines, buildings •Financial assets •Property rights	•Labor, intermediate products	•Largely hierarchical within firms •Growth of joint ventures •More sophisticated markets
	(mainly domestically, but increasingly foreign sourced)		
Twentieth century	•Property rights •Intellectual assets • 'connectivity' advantages	•Leasing of property •Intermediate products •Knowledge and information •Collective(social) assets	•Hierarchical within firms •Coalitions between firms •Networks •Markets
	(Accelerated movement towards the global or regional creation, accessing and utilization of assets)		

Source: John Dunning, "Theories and Paradigms of International Business Activity", Edward Elgar, 2002, pp 477.

Knowledge-based intangible assets bring about MNCs the following advantages. First, as Markusen argued, knowledge often has a joint character, like a public good, in that it can be supplied to additional production facilities at very low cost. Blueprints, chemical formulae and pharmaceuticals, trademarks, and other marketing devices all have this characteristic. The joint-input characteristic of knowledge-based assets has implications for the efficiency of the firm and for market structure.<sup>[53]</sup> Second, knowledge - based assets can be transferred easily back and forth across space at low cost. For example, technological personnel can visit many separate production facilities at a relatively low cost.<sup>[54]</sup> Third, MNCs often possesses considerable market power from the "advanced" knowledge, which implies that the latter may extract considerable monopoly rent as payment for the services of its assets. Therefore, MNCs become exporters of the services of firm-specific assets while a host country gets the benefits of the MNCs' technical and managerial expertise.<sup>[55]</sup>

MNCs' ownership advantages have their own weaknesses. On the one hand, different from tangible assets, MNCs' ownership-specific advantages are more and more of public goods rather than private goods with the technological progress. For example, know-how can often be used in another enterprise without being substantially impaired. Thus the transaction costs are very high for market transactions of these "public-good-like" intangible assets without effective institutional devices for facilitating trading in these assets.<sup>[56]</sup> If they enter into an "imperfect" market without effective intellectual property protection (IPP) in the host countries, MNCs have to be faced with

the risk of losing their own assets. Yamin held that given the extra costs of operating in foreign countries, the firm may not enjoy a net cost or revenue differential over its domestic rivals, if its advantages can't be deployed at zero or a low marginal cost in the host country.[57] Of course, external markets for all intangible assets are not subject to the same degree of market failure, hence transaction costs vary.

On the other hand, MNCs have to be forced with the pressure from the going-up cost of producing ownership advantages, especially, with global diffusion of technologies and innovation increasing rapidly. For an example, the growth rate of U.S. expenditure on R&D outpaces that of GDP except the years of 1993 and 2002, which means that it is more expensive for U.S. to create the same growth rate of GDP (see Chart 4). In order to spread the cost of innovation, it is more important for the products of innovation to access to the more market as soon as possible than before. MNCs began to appear in the liberalizing developing economies except in the developed countries and relocate their production in different countries in a more cost-effective manner such as sourcing of raw materials in some countries, producing the labor-intensive products in other countries and keeping most of major R&D activities in their home countries.

Chart4 Growth rate of real R&D expenditure and GDP from 1980 to 2003(percent)

Source: Barbara M. Franmeni and Sumiye Okubo, "R&D in the National Income and Product Accounts: A First Look at its Effect on GDP", WP 2002-01, [www. bea.gov/bea/papers/R&D-NIPA.pdf](http://www.bea.gov/bea/papers/R&D-NIPA.pdf).

## 2. Limits of MNCs' Internal Market

MNCs' internal market can partly resolve the externality problems led by the "public-good-like" nature of their own intangible assets. The modern theory of FDI suggests that MNCs' internal market is developed in response to imperfections in the goods or factor markets and hence MNCs' ownership advantages can be transported between the home and the host nation within the internal market. Pearce has identified a positive relationship between R&D intensity and internalization.[58] The internal market allows proprietary information to be used efficiently, especially in the case of a classic externality where the market mechanism fails to set a price for the private production and dissemination of knowledge. FDI is one of outcomes of intangible assets (advantages) being internalized by MNCs.[59] At the same time, some organizational techniques are created to serve the purpose of internalizing externalities, such as vertical integration, and long-term licensing agreements[60] For example, in order to curb piracy, Texas Instruments, International Business Machines Corporation, and Microsoft Corporation all have become partners with local industries in Taiwan through licensing agreements for computer hardware, software, and chip production.[61] Mansfield and Romeo, based on obtained

information concerning the age of the technology transferred abroad by 31 U.S.-based MNCs, found that the average age of the technologies transferred through licenses, joint ventures, and channels other than subsidiaries is commonly higher than that of the technologies transferred to subsidiaries, indicating that firms tend to transfer their newest technology overseas through wholly owned subsidiaries rather than via licenses or joint venture, but the latter channels become more important as the technology becomes older.[62]

However, based on the theory of the transaction cost, internalization has its own transaction cost, which means internalization plays a limited role in overcoming the market failure. As Williamson has pointed out, internalized forms of production do not come without cost. Removing transactions from markets and organizations may also experience serious incentive and bureaucratic disabilities.[63] In addition, mutually advantageous opportunities for the trading of know-how will not be realized unless the institutional framework exists to provide the appropriate linkage mechanisms and governance structures to identify trading opportunities and surround and protect the associated know-how transfers,[64] which also causes an increase in the external transaction cost. The increase in the transaction cost from MNCs inside and outside forces MNCs to seek the external support.

Out of the purpose of protecting their ownership advantages, MNCs demand more and more for cooperation with local governments or cooperation between governments to settle down the problem of the market failure. From the global perspective, what MNCs needed most is to copy with “imperfect market” of intangible assets existed in the developing countries. This is because developed countries have established a relatively strong IPP system based on their long history of IPP while there is a relative weak IPP or even no IPP system among developing countries, which would hurt MNCs largely.

### 3. Difficulties in Multinational Negotiation on IPP

Considering the characteristics of MNCs’ ownership advantages, it is the most beneficial for MNCs to establish a widely global system to protect MNCs’ ownership advantages because MNCs could access to worldwide markets to spread their cost of innovation to the greatest extent. In fact, a number of large MNCs with a particular interest in protecting their intellectual property rights (IPRs) played a major role in the multinational negotiations which led to the Trade-related intellectual properties (TRIPs) agreement during the Uruguay Round. For example, the special view of IPRs produced by MNCs has subsequently become the potential set of global norms lying at the heart of the TRIPs agreement.[65] The purpose of MNCs’ active participation in multinational negotiation is to extend IPP to countries that currently provide it only weakly or not



at all, particularly certain developing countries of which MNCs want anxiously to access to market. As a result, the new section of the GATT Uruguay Round agreement on TRIPs reflected the demand of developed countries for IPP such that countries must give twenty-year patent protection for almost all inventions, products and processes in almost all fields of technology, and meanwhile, worldwide standards on IPP are coupled with stricter enforcement and effective dispute settlement promoted by the U.S. and widely endorsed by most Developed Countries.

With regard to developing countries, it seems beneficial too to build up a global IPP system. First, Effective IPP benefits developing countries to attract more FDI, promote their economic growth and also encourage domestic investments in innovation. A large evidence shows that MNCs are reluctant to build their plants or issue their licenses in countries where their technology and know-how are not protected effectively because MNCs export their products based on IPRs in order to recover costs of developing the property and to prevent counterfeiting and piracy.

Moreover, IPP can lead to more technology transfer. Taylor presented a simple dynamic model of endogenous growth to examine the role IPRs play in world trade, growth, and technology transfer. If innovators can carry their research technologies across borders, then technology transfer creates a region of factor price equalization, an improvement in the allocation of the world's technical resources, and, in many cases, a rise in world growth. These benefits, however, will fail to accrue if countries offer only partial protection for IP. If foreign made innovations could not be protected, asymmetric protection distorts natural trade patterns, leads innovators to comply less than best practice research methods, and lowers aggregate R&D.<sup>[66]</sup>

Third, many governments contend that weak or nonexistent patent protection distorts natural trading patterns and reduces the ability of firms to transfer technology abroad. Lee and Mansfield first carried out the empirical relationship between a country's system of IPP and the volume and composition of U.S. FDI in that country. The results proved the proposition that a country's system of IPP influences the volume and composition of U.S. FDI. Meanwhile the authors pointed out that it should be recognized that a country's system of IPP is "inextricably bound up with its entire legal and social system and its attitudes toward private property" rather than the mere passage of a patent or copyright law.<sup>[67]</sup>

However, there are still a number of debates on IPP in the multinational system. The focus lies in that it is not sure whether to build up IPP system or enforce the laws or rules about IPP would benefit further developing countries or not depending on the following "costs" in spite of the existed interests above for developing countries.

First, developed and developing countries may differ on the interest of protecting technological information. Developed countries seek maximum protection while developing countries claim that they are entitled to special treatment to encourage the creation and development of indigenous technology. Chin and Grossman found that the interests of the north and the south are generally opposed based on a North-South Cournot duopoly model and concluded that unless northern R&D is very productive in lowering unit production costs, the southern government's best policy is to "look the other way" while southern firms infringe on northern IP.<sup>[68]</sup> In addition, those provisions of TRIPs were extremely controversial in many less developed countries such as India and Brazil. Comparing with the developed countries, the IPP provided by developing countries has tended to be shorter in duration, less comprehensive and much less vigorously enforced. Since the move to common world standards in the TRIPs section of the Uruguay Round GATT agreement does not involve significant increases in IPP by the developed countries, it is very likely those developing countries as a group will lose from the worldwide standards on IPP.<sup>[69]</sup>

Second, developing countries may compete for free lunch from northern public-good-like IPRs rather than cooperate among themselves. The public-good-like feature of northern IPRs causes a free-rider problem among southern countries with respect to protection for northern IPRs. Once IPRs are created, it could be accessed by southern country very freely. Usually there are two kinds of free-riders problems. One is that the south as a whole free rides on the north for technology needed by both of them. The other is that which southern countries should be responsible for providing legal protection for northern IPRs. Although there may be mutual gains between the North and the south, it requires joint efforts of southern countries to exploit them. Forcing a single southern country or a small group of southern countries to raise their protection likely will hurt them, which largely explains why southern countries are reluctant to raise their protection unilaterally. Moreover, the net gains for northern countries from forcing some southern countries to raise their protection are probably small, owing to the offsetting effects of free-riding.<sup>[70]</sup> Thus, the protection provided by southern countries for northern IPP is insufficient. For example, U.S. used their considerable market power to force some developing countries to enforce IPP, but in fact, the actual result of IPP is far from the target. After all, free riding on other's IP and the profit from piracy still outweigh the liberal norm of respect for property rights.<sup>[71]</sup>

Third, a relatively high level of political integration is needed to undertake at the outset of cooperation between developing countries. Developing countries of different developing level are likely to opt for different strategies. Developing country of the higher developed economy is likely to pursue an "expansive" strategy (in nature aiming at an absolute increase in gains among countries of the region), and on the reverse, the less developed country would like to pursue a

“distributive” strategy (in nature determining in advance the distribution of any potential gains). Efforts based on less comprehensive political integration are more likely to be subject to a disintegrative dynamic.[72] With regard to IPP, it is almost impossible for all developing countries to cooperate each other without the base of high level of comprehensive political integration.

In addition, few demand for IPP comes from developing countries MNCs, which also leads to non-cooperation between developing countries and developed countries. Not all of MNCs will produce the demand for IPP. Kumar argued that Third world MNCs do not manufacture new products, but rather sell those products for which technology has been standardized. These firms do not have the advantage of familiar brand names and consequent consumer loyalties. As a rule, third world firms do not have access to the latest manufacturing technologies and do not operate in technology-intensive industries. The marketing and management skills of these MNCs are not strong either, at least as compared with MNCs from industrialized countries. Ownership-specific variables usually stressed as assets of MNCs can hardly explain the overseas expansion of third World firms. Perhaps the most important strength of third world firms lies in their less advanced, though not necessarily less efficient, manufacturing technologies, which function reasonably well in other developing countries. The second and perhaps equally important asset is their lower overhead and expatriate costs, different from those firms from industrialized states who usually have high cost of the above. Besides the above two assets, third world MNCs also have an advantage in their familiarity with developing countries to help them easily establish rapport with their employees, local businessmen, and governmental authorities, which made industrialized MNCs exasperating.[73] Due to not owning many of IPRs by MNCs from developing countries, naturally they would not lobby their governments to protect intellectual property.

As seen above, it is difficult for MNCs to protect their ownership advantage globally, or the cost is a little high, therefore MNCs direct their efforts to regional trade policy.

#### 4. Shift to RTAs

Since the 1980s, MNCs from developed countries have begun to propel actively the RTAs related to IPP. Some American industry association in service, investment, high-technology, agricultural chemical, pharmaceutical, and entertainment sectors lobbied Congress for more effective IPP abroad.[74] In Europe, “There was increasing political activity of these French and German MNCs at the EC level in emerging and stronger EC policy networks and communities. The firm’s participation and influence were strongest in EC technology policy communities dealing with collaborative R&D projects.”[75] As for APEC, ABAC, the representatives of big business, has

been lobbying for integration measures beyond free trade, including movement of people, services, and capital. It has also demanded common product standards, harmonized customs procedures, an APEC business visa, a Pacific investment code, common rules on the protection of IPRs, and the effective monitoring mechanism to ensure that the promises of the integration are kept.<sup>[76]</sup> The members of ABAC are mainly from U.S., Japan and Korea.<sup>[77]</sup>

MNCs active participants in regional IPP are because regional IPP brings about more gains than cost. Property-rights theory holds that the impetus and demand for institutional change comes from the bottom, that is, from those actors incurring the greatest opportunity cost in the institutional status quo. Regional institutional-building may be viewed as an attempt to internalize externalities that cross borders within a group of countries. The cost of these externalities increases as new technologies raise the potential for gain from market exchange. Thus payoffs to regional rules, regulations, and policies are increased. Lance Davis and Douglass North similarly argued that the possibility of profits that can not be captured within an existing structure leads to the formation of new (or the mutation of old) institutional arrangements<sup>[78]</sup>. Harold Demsetz's argued that "increased internationalization, in the main, results from changes in economic values, changes which stem from the development of new technology and the opening of new markets, and changes to which old property rights are poorly attuned".<sup>[79]</sup> Malti argued that as new technologies increase the scope of markets beyond the boundaries of a single state, actors who stand to gain from wider markets will seek to change an existing governance structure in order to realize these gains to the fullest extent. Malti continued that these problems may raise the appeal of external safeguards in the form of an integrated governance structure, particularly as both efficiency costs of private contractual arrangements and efficiency gains of external safeguard increase with greater frequency of transactions. External safeguard can address not only firm-level problems but also government-level opportunism, thus enabling market players to economize optimally on trade and investment transaction costs.

It is also feasible to cooperate with some developing countries. Deardorff argued that it will enhance world welfare if the northern code of protection for IPRs is extended to part of the south. Under specified circumstances it is not optimal to extend patent protection to all countries of the world. Demsetz argued that if all innovation originates in one part of the world, then extending patent protection to a broader and broader area does have these two offsetting effects,<sup>[80]</sup> but these are diminishing returns to the first of them, thus at some point the costs due to extending monopoly pricing to existing inventions come to outweigh the benefits of generating new ones.<sup>[81]</sup>

Yang also argued that cooperation among some southern countries could overcome the free-rider problem among the cooperating parties. If the cooperating southern countries choose to raise their protection, both the non-cooperating southern countries and northern countries are better off. Otherwise they will be worse off. Cooperation among southern countries can help to achieve Pareto efficiency among southern countries. Meanwhile, northern countries can also benefit from cooperation among southern countries. However, Pareto efficiency may not have been achieved from the global perspective, because southern countries as a whole may still free-ride on northern countries for new technology.<sup>[82]</sup>

In fact, some developing countries have been chosen to join some “developed groups”. These developing countries have some common features and therefore developed countries are extending their RTAs to these developing countries, such as Mexico involvement in NAFTA, participation of part of European developing countries in EU and APEC including Southeast Asian countries that have shifted their trade policy from import substitution to export orientation, and China and Vietnam in transition.

First, these developing countries are or have been liberalizing economic policies and gradually accepting the mind of believing in the role of market in the economic life. For example, in the past, developing countries refused to issue patents to foreign investors because they believed that patent protection provided a temporary monopoly and raises the prices of protected property. Other developing countries did offer protection, but on a relatively limited basis. Since the mid-1980s, these liberalizing developing countries have begun to adopt laws and policies for IPP based on a conception common to the industrial world—namely IP as private property instead of the “common heritage of mankind.”<sup>[83]</sup>

Second, these developing countries have had a fast growing market, realistic or potential since directing to market-based economic policies, and also have a relatively stable macro-economic and political environment fit for operation and management of MNCs in there. MNCs are attracted not only to countries with low labor and other costs but also to countries that are stable economically and politically, have good physical infrastructure and a skilled labor force, and that operate under the rule of law.<sup>[84]</sup> For example, China has become the largest receipt of FDI in the world in recent years because of its lasting and high economic growth and the great potential market.

Third, the cost of negotiation with some developing countries is lower for developed countries due to the points above. The success of NAFTA as a good example of RTAs between developing and

developed countries lies largely in that Mexico has a strong domestic constituency for IPP except for her low cost of labor.[85]

Therefore, RTAs becomes another effective way by which MNCs can realize their goals of protecting their IPRs. The higher degree of ownership-specific advantages, the deeper regional integration MNCs demand for. Therefore, new regionalism is based on the demand of MNCs for IPPs and of new features different from old regionalism, as said before.

#### **IV. The Case of East Asia**

##### **1. Slower Regionalism than Regionalization**

The process of regionalism is slower than that of regionalization in East Asia.[86] In terms of intra-region trade, FDI and production network, the extent of East-Asia regionalization is not lower than those of other regions such as EU and NAFTA. However, East-Asia regionalism, especially the regional institutional building falls behind the regions above.

Market-driven integration or regionalization has been occurring in East Asia since the mid-1980s through increasing trade and investment linkages. In East Asia, one distinctive feature of regional integration is that it is driven primarily by cross-border private capital flows searching out profitable opportunities, which is called "Market-led" integration. Much literature and data showed the fast growth of trade and FDI and the rapid development of regional production network.

First, there has been an increase in intraregional FDI since the beginning of the 1980s. The value of FDI inflows from East Asia to other East Asia economies or groups, increased in the 1990s, except for China's FDI to ASEAN and ASEAN's FDI to China.

Second, East-Asian intraregional trade, especially in components, parts, and inputs is one of the prominent feature in the trade field and has grown rapidly. From 1985 to 2001, intraregional exports from East Asia (ex Japan) increased almost ten fold and Japan's exports doubled. This is much higher growth than any other region- EU and NAFTA tripled whilst Latin America and South Asia quadrupled.

Third, the East-Asian regional production network has been developed, especially in 1990s. In the early stages of development, a production network might consist simply of the production of one small part or component of a good in a low-cost country and then its re-importation to the home country for assembly into the final good. This process has changed over the years so that

now involves many countries, and thus border crossings, in the production and assembly of a final product.[87]

The greatest contribution to regionalization is from regional MNCs.[88] The emergence of regional production centers in several sectors, including electronics and automotive are mainly driven by MNCs.[89] Japanese MNCs is the first driver of regionalization (whose role can not be taken place by MNCs from any other regional economies till now) and followed by NIEs MNCs. Takeshi Aoki argued that “perhaps the most remarkable feature of the third current wave of FDI” is that “Japanese affiliates are playing an important role as hubs in the establishment of networks.” He also notes that “this is in sharp contrast with U.S. MNCs in Malaysia, which do not form networks in spite of the fact that nearly all are producing ICs and semiconductors.”[90]

The relationship-based ethnic business network is another effective network of linking regional production and trade.[91] This comprises a number of tightly held, medium-sized family-owned firms that transcend national boundaries and account for up to 70 percent of the private sector in countries such as Malaysia, Thailand, Indonesia, and the Philippines.[92] Based on “natural” factors such as geographic proximity, ethnic ties and industrial linkages, Ethnic Chinese networks are very good at joining with different forces such as local, Western, and official capital from China and other Asian countries. Thus, the ECBN and the regional production network (RPN) formed by the Japanese are major economic networks in the Asia Pacific region.[93]

Due to the contribution from regional MNCs to regionalization, East-Asia has grown into an increasingly interdependent region. Urata argued that for East Asia as a whole, the procurement of inputs from East Asia increased from 1985-95 and thus intra regional interdependence increased for all economies except Korea and Japan.[94] In fact, driven by Japanese parent companies and most recently by an increasing number of NIE-based companies, East Asia is developing its own identity, especially in terms of independent economy, and setting itself apart from the regional economies of Western Europe and North America.[95]

However, East-Asian regionalism or regional institution building has not been developed as well as regionalization. According to Viner’s classic economic criteria for a successful custom union, East Asia did not meet. Sander argued that so far, regionalism, defined as aiming at predominately policy-led integration process, has remained rather “shallow.”[96] Most of actual and potential trading arrangements involving East Asian economies are still in the form of proposals and studies, or the negotiation stage. Some may never be implemented since there remain many unresolved issues, and others may only become implementation agreements

associated with APEC processes. In this sense, East Asian regionalism has been far from entering into the stage of deep integration or institutionalization.

Compared with EU, East Asia has not owned a long history of regional integration. In the stage of old regionalism, the most salient regionalism is ASEAN. Later on, although new regionalism has been grown fast and spread all the over the world, no other regional institutional organizations than ASEAN Free Trade Area (AFTA) existed in East Asian region. Three major regional countries, that is, Japan, Korea and China, are newcomers to RTAs and they have been undergoing a strategic policy change from favoring multilateral approach for global free trade to actively participating in regional grouping. Of course, most of East-Asian members joined APEC led by U.S. However, APEC is usually said as a “Club of gossip” and not an institutional unity. In fact, till now, almost all East-Asian RTA s are mostly established immediately after the financial crisis in 1997. In addition, due to diverse social and cultural structure and different level of economic development, most East Asian countries have preferred loose and voluntary cooperation schemes without treaties or institutionalized arrangements. It is very difficult for East Asia to copy EU.

Even a good example of the recent institutional integration--- ASEAN Ten plus Three, is still a goal not a reality of new regionalism, like NAFTA or EU. The establishment of Ten plus Three is to ultimately create a single common market, common union and perhaps ultimately a political union in the East Asian region. According to FTA framework, it still needs ten years for a real institutional unity to appear based on the present situation during its construction without considering any possible change. Thus East Asian Free Trade Area has a long way to go.

How do we explain the phenomenon of slower regionalism than regionalization? This paper thinks that no full development of regional market-oriented economy leads to the slower process of regionalism.

## 2. Characteristics and Impact of East-Asian Regionalization

East Asian regionalization is based upon diverse industrial structure among members and therefore different from EU or NAFTA. The production pattern in EU is a horizontal division of production motivated by MNCs and therefore there are common benefits for regional institution among these developed members. However, in East Asia the vertical division of production propelled by MNCs has been established starting from the 1980s. It is led to by the pressure of the going-up cost, especially the cost of labor in one country where MNCs have to shift their labor-intensive production base to the host of low-cost labor. This process was held by the



segmentation of production into the operations of assembly that could be undertaken with low-cost labor in the less developed countries, while technology-intensive operations remained in the advanced nations. Thus, with the continuous shifting of production across countries, East Asia becomes mainly the base of production, especially the labor-intensive production rather than market. Based on such a production pattern, there is seldom common interest for regional institutionalization among members.

At present, Japan is the only one economy in East Asia that owns the independent R&D capabilities. Japanese firms possessed the ability to absorb and improve upon foreign technology through indigenous R&D and the presence of innovative component manufacturers. As early as the 1920s and 1930s, Japan commenced its innovation in the electronics industry and got some significant breakthroughs in areas such as the reception of TV signals and antennae technology as well as the development of materials such as ferrite. In the 1940s Japanese firms created the institutional framework and knowledge which played an important role in indigenizing foreign technology in the postwar period.<sup>[97]</sup> Therefore industrialization in Japan had a strong indigenous innovative base prior to the dramatic change in Japan's global economic presence in the 1950s.<sup>[98]</sup> In the mid-1980s, Japan entered new development cycle. Dunning argued that two things happened to Japan. First the ownership-specific advantages of a country's MNEs become more firm specific (i.e. of a transaction cost minimizing kind) and less country specific (i.e. asset based). Second, the locational decisions by both foreign and domestic MNEs become less based on the comparative advantage of factor endowments, and more on the strategies of competitors supplying regional or global markets, the desire to fully exploit the economies of large scale production, the need to reduce market instabilities and uncertainty, and the incentive to reap the gains from integrating related activities over space.<sup>[99]</sup> Till now Japan has exported high value-added commodities made using domestic high technology, such as computers and integrated circuits and becomes the larger exporter of technologies (See chart 5).

<http://www.stat.go.jp/english/data/kagaku/1531.htm>

By contrast, Korea and Taiwan did not have the similar domestic capabilities. Katz argued that fundamentally, the industrial technology development (ITD) process for developing countries is based more on learning than innovation<sup>[100]</sup>. Amsden also made a similar conclusion after comparing the industrialization of Taiwan and Korea with that of developed countries. Cyhn held that one essential key to Korea's rapid industrialization has been the successful learning of foreign technologies.<sup>[101]</sup> Usually, developing countries had weak indigenous innovative capabilities in the early phase of industrialization and placed heavy reliance upon foreign technologies. Copying, reverse engineering, and adaptive imitation are the major means of

absorbing foreign technologies.[102] Amsden further notes that “beginning with Korea and Taiwan, late-industrializing countries were the first to attempt to penetrate world export markets with little more comprehensive advantage than low wages.”[103] Although there have been significant increases in R&D spending in both Korea and Taiwan since the Plaza Agreement, the “dependent” nature has not been changed a lot, as evidenced by the steady expansion of both Taiwanese and Korean bilateral deficits with Japan. Bernard and Ravenhill argued that dependence can also inhibit indigenous innovation or, as is often the case in East Asia where foreign suppliers of key inputs are also competitors, delay supply of new technologies and therefore affect the speed with which new products are developed and marketed and even give rise to political problems.[104] Till now Korean and Taiwanese firms in export industries similar to Japan’s have lacked comparable innovative capacity and relied disproportionately on original equipment manufacturing (OEM) (See table 4).[105]

In Southeast Asia, the basis of industrialization is even weaker than the Korea and Taiwan. Yoshihara’s comment that Southeast Asian region has experiences “technologyless” industrialization is still largely applicable. In contrast to the Northeast Asian experience, there is a very heavy dependence on subsidiaries of transnational corporations for these manufactured exports. The foreign subsidiaries in those export processing zones (EPZs) lack backward linkages with the local economies. The participation of local in the sense of domestically owned firms in these networks is far less widespread in Southeast Asian than in Korea and Taiwan.[106] This method of development usually severely limits local participation in design-making. A few subsidiaries companies, mainly in Singapore, have evolved into regional headquarters or hubs for the distributed R&D activities of the corporation. However, in Thailand and Malaysia, most MNC subsidiaries have not yet reached this stage and in Indonesia, the Philippines and Vietnam they are even further behind. Learning within Southeast Asian MNC subsidiaries has been a long-term process, in many cases occurring over twenty years or more.[107] More severely, as technology sophistication increases, the ability of local personnel to handle the technology and its associated processes declines.[108] In short, East Asian firms except for Japan’s, by and large, remain small latecomer players, rather than major technology leaders or followers.

The impact of the present East Asian production pattern on the process of regionalization is that East Asia economies can not make a great progress in deepening regional market. As a production base, the industrial structure is just the result that Japanese domestic production is extended to the East Asian region. To a great degree, this kind of extension is not involved in many elements of market. Therefore, it could not cause East Asian economies to orientate the regional market although East Asian economies are or having been liberalizing their own policies.

Further more, the market force from this kind of production pattern has lacked adequate capabilities to integrating regional economy and hence does not demand for deepening market. On the contrary, in order to attract capital and resolve the employment issue, there existed a little “beggar-the-neighbor policy” among members. All these show the low extent of regional marketization in East Asia despite of high level of regionalization similar to that of EU and NAFTA

Table 4 European, US and Japanese PC/telecom manufacturers moving into Taiwan, Korea, and China

2000	Mobile terminals	Philips(Netherlands)	CRT, LCD and handset department of LG	Korea	Acquired
	Semiconductors	IBM (USA)	Mosel Vitelic Inc.	Taiwan	DRAM production outsourced
	Semiconductors	Philips	TSMC	Taiwan	Invested
	PC	Compaq (USA)	Inventee	Taiwan	Expanded outsourcing PC production
2001	PC	Dell (USA)	Quanta Computer	Taiwan	Expanded outsourcing PC production
	Low-power memory for mobile handsets	Fujitsu	Winbond Electronics	Taiwan	License provision and production outsourcing
2002	Handsets	Ericsson (Sweden)	GVC	Taiwan	OEM
	Handsets	Motorola (USA)	BenQ	Taiwan	OEM
	Handsets	Nokia (Finland)	Han Hai Precision Industry	Taiwan	Improved production facilities and cultivate Chinese market
	High-speed and low-power memory for handsets	Fujitsu	SMIC	Shanghai, PRC	Production outsourced
	SRAM for handsets	Toshiba	SMIC	Shanghai, PRC	Production outsourced

SMIC: Semiconductor Manufacturing International Corp.

SRAM for handsets: memory that enables simultaneous read/write without the need of storage activity.

Source: "Digital Economy in East Asia," FIF Special Report No.6 vol.2, 2002, from Ministry of Economy, Trade and Industry, "White Paper on International Trade", Nihon Keizai Shimbun.

### 3. Regional MNCs' Demands for RTAs: as an Example of IPP

Firstly, Japan, as the most developed countries, has not strong demand for IPP due to its structure of production similar to other East Asian members. The East Asian region has been regarded by Japanese not as its target of market but as the base of production. The purpose of Japan transforming its industries to East Asia is to produce the products at the cost as low as possible and compete in the international market with those products of U.S. and EU. Lipsey argued that as earlier major investors, Japanese and U.S. firms differed in many aspects. In terms of industrial sifting, U.S. investments and affiliate exports were distributed across industries along lines of U.S. comparative advantage, while the industry distribution of Japanese affiliate production and exports was closer to that of the host countries. In terms of sale orientation, U.S. had changed its role from transmitting home country technologies and comparative advantages to accessing to host countries' market of growing faster, while Japanese affiliates replace the export role of U.S. affiliates in East Asia.<sup>[109]</sup> Due to Japanese regarding the East Asia as the production base rather than the market, Japan MNCs did not need to use their ownership advantages to compete with others in East Asia. Furthermore, Japanese MNCs have put up private institutional arrangements in place to cope with the risks involved in regional trade and investment: creation of supplier network,<sup>[110]</sup> supplier cooperation clubs and Japanese General trading companies, and also built strong marketing networks that facilitated worldwide brand recognition. At the same time, the local firms have the weaker capabilities of production and it is hard for them to copy Japanese products. The long-term vertical division of production pattern proved that East Asia has not had the adequate capabilities to catch up with the Japanese abilities of high technology. Therefore, Japanese MNCs are not worried about the copy of its technology and seldom produces demand for IPP.

Secondly, other East Asian members have little ownership advantages and seldom demand for IPP. For most of East-Asian economies, "intra-regional firms are not regionalized but regional at best." Dicken, et al argued that "Regional solution" is preferred by emerging MNCs from Asian newly industrial economies that lack ownership-specific advantages to compete with global MNCs in their "home turf". On the one hand, they have neither sufficient capital nor strong brand names to compete with leading MNCs. On the other hand, they are reluctant to go beyond the Asian region because their competitive advantage is largely embedded in the region. They are mostly

Asian firms with international operation, not reverse. Asian MNCs find it difficult to give up privileged access to markets and information in Asia, to transplant their business networks successful in the other triad regions.<sup>[111]</sup> The main reason lies in the lack of technology to integrate their home production activities to other regions. Some research concluded that total factor productivity (TFP) growth played a surprisingly small role in East Asian success.<sup>[112]</sup> Totally, they have few ownership-specific advantages and naturally demand little for local governments to cooperate or between governments to keep their ownership-specific advantages.

Thirdly, demand for East Asia IPP is from the region outside, mainly from U.S. After the decades' development, East Asia has become one of main regions of the fast growing potential market. In order to access to this regional market, at the behest of various U.S. corporate interests, the U.S. have initiated bilateral investment treaties with some Asian developing economies such as Singapore, China, Taiwan and Korea since 1980s, and achieved quick results by linking higher levels of protection to trade issues through section 301 of the U.S. Trade Act. These treaties define "investment" to include intellectual property and provide national and MFN treatment for FDI, and others. The treaties generally grant U.S. firm more protection than they had under the previous national laws of the treat partners.<sup>[113]</sup> These bilateral treaties brought limited results, especially in the area of enforcing the IPP. Later on, U.S. hopes to enter into the whole regional market and initiated a trans-Pacific organization---APEC. In APEC, U.S. insisted to fasten the pace of market opening to outside, especially East Asian region. Some suggestions were provided including Bogor Declaration in 1994 and EVSL in 1997. However, U.S. met the strong opposition from East Asian members, particularly Japan. At a result, these plans ended in defeat.

Based on the situation above, East Asian regionalization driven by MNCs in fact is a unilateral action that means MNCs shift their production base from developed countries to developing countries in one direction rather than bilateral flow. Thus East Asia regionalism built up on this basis also is an individual action, rather than collective action or members differed in their interests of demands for regionalism largely. Yamazawa argued that regionalization in East Asia is a market-driven integration without a formal institutional framework: no region-wide attempt has ever been made to liberalize trade.<sup>[114]</sup> East Asian members opened their market in exchange for their own economic growth, not building a regional integrating market. Thus in many situations, "competition" for liberalization policy is far more important than cooperation of policy among member. Malti held that little scope for mutually beneficial exchange exists and demand for integration by market across is consequently weak such as ASEAN where their companies compete in the same industrial sectors with each other.

Due to this shallow level of marketization, till now, East Asia regionalism is still a “Mix” which has features of both old and new regionalism. From the perspective of old regionalism, major East Asian RTAs are still driven by governments as both the demander and supplier. Evan argued that the drivers behind East Asian regionalism tend to be officials and academics and only occasionally business interests; they do not command consistent high-level political attention or widespread public interest.<sup>[115]</sup> For example, after the financial crises in 1997, there has been growing concern and recognition by the East Asian leaders that a major regional crisis can not handle by any single state, hence the gradual emergence of East Asian regionalism. However, East Asian RTAs did not have the institutional feature of old regionalism. From the point of view of new regionalism, East Asia RTAs are not driven by the forces from the bottom largely, but the outcome of political cooperation are not involved many contents of deepening regional market. Sometimes, it is thought that the emergence and development of East Asian new regionalism is devoted mainly to response to the extra-regional challenges<sup>[116]</sup> rather than of its own wish.

#### 4. The Future of Regionalism in East Asia

East Asian regionalism needs to resolve the following structural problems such as transforming the economic structure from the production base to the market; establishing the regional market institution and encouraging innovative activities. However, some good signs have shown changes in regional structure.

First, China has emerged not only as a production base but also as a rising market with the rapid economic growth. In 2003, import from China has surpassed that from Japan and became the third import market. For another example, Japan has been importing increasingly from China, which drove China to replace the U.S.A. as Japan's leading trade partner since 2002. China's structural change would cause the regional transformation, which would alter the East Asian ideal together with other East Asian members.

Second, East Asian firms, especially developing economies, is accumulating their own ownership advantages through both continuous import of high technology and developing their own domestic capabilities. Many Korean and Taiwanese companies have made significant progress in industrial deepening, in applying advanced technologies, and in upgrading the skills of their labor force. Meanwhile Korean firms are attempting to become “technologically independent”, as a way for them to become more competitive than before,<sup>[117]</sup> and establish a number of research centers established world-wide.

Third, With the East Asian capabilities increasing and the intensive competition of regional market, Japan is improving it's the level of transferring technology (See table 5) from low-value added to high; from simple training of personnel to comprehensive; from no local R&D to building up local R&D centers.

The regional market forces, as the driver and demander of East Asian regionalism, are increasing gradually. In fact, developing countries have begun to encounter new problems as their enterprises have expanded to manufacture technologically sophisticated goods for export. For example, computers exported from Taiwan have been copied by companies in England, the PRC, and Southeast Asia, then turning the tables on the old pattern: "before they copied others, now others copy them." In response to domestic demand from large well-established export-oriented enterprises in Taiwan, three industrial organizations have lobbied for policy changes to curb piracy and counterfeiting of Taiwanese goods.[118] As more developing countries' domestic industries suffer from a lack of adequate IPP and as their high value-added export products that incorporate IPRs come to be pirated, these industries will support stronger enforcement in some industries. The examples such as Videotape movie producers and record producers in the Philippines, Singapore, and Korea, Computer associations in Malaysia and Thailand have all demonstrated an interest in stronger standards of IPP.

With the accumulation of ownership advantage in East Asia, the mutual demand for IPP will go up and therefore drive East Asian regional institution further. In the future, East Asia will enter into the stage of the real new regionalism in spite of a long-run process.

Table 5 Stages of Japanese MNC activity in Pacific Asia: impacts upon technology transfer and "hollowing out" in Japan

	Stage I: 1960-85 (Predominantly import-substitution oriented factories)	Stage II: 1985-1993 (Predominantly export-platform oriented factories)	Stage III: 1993-2000 (export- platform factories with broader range of sophisticated assembly production )
1. Technology transfer			
(a)Technology Transfer from HQ to Asian Subsidiary			
Added-value nature of production	Low added-value	More value-added	More value-added
Training of local personnel	Simple	More comprehensive; increasing technical skills	comprehensive; increasing technical skills

Localization of management	Joint venture but little localization	100% Japanese equity and little localization	some localization
Localization of innovation	Absent	Commencement of local design and development centres	Increasing use of local design and development certain locations
Local R&D capability	Absent	Largely absent	Commencement of local R&D centres in certain locations
(b)from Asian subsidiary to local non-Japanese companies			
	Absent, little use of local suppliers	Increasing use of local Japanese suppliers	Increasing use of Pan-Asian supply management, and OEM arrangements with NIEs
2.Impact upon “hollowing out” in Japan”			
	Little impact, except in textiles and ‘smoke-stack’ industries	Increasing shift of production to Asia; higher emphasis on added-value production in Japan	Many Japanese firms begin to specialize in production only for domestic market

Source: Roger Hayter and David W. Edgington, “Flying Geese in Asia: The Impacts of Japanese MNCs as A Source of Industrial Learning”, *Tijdschrift Economische en Sociale Geografie*-2004, Vol.95, NO.1, pp3-26.

## V. Conclusion

The emergence and development of new regionalism is, to a great extent, related to the situation that MNCs wish to enter into developing countries’ markets. However, it is not easy for MNCs to access to this developing market. MNCs still have to be faced with the great challenge brought about by both their public-good-like ownership advantages and increasing cost of producing ownership advantages. If MNCs did not extend their market to developing countries, they would not realize the purpose to spread the cost of producing ownership advantages. However, if they did, they would face the risk of losing their ownership advantage due to free riding problem among developing countries without effective IPP. Therefore, MNC are attempting to build up the multilateral framework to resolve this puzzle. However, this process is not going very smoothly and thus they direct their efforts towards RTAs, which drive the rising of new regionalism.

With regard to the case of East Asian region, East Asian special production pattern which is vertical division of labor and production base leads to low extent of regionalization and also



demands little for regional institutionalization, at least from the demand perspective of regional integration. Almost of East Asian RTAs is demanded and supplied by the governments, similar to the model of old regionalism. Due to lack of common interest, especially in IPP, there is not a real example of new regionalism in East Asia. East Asia needs to resolve some regional structural problems such as transforming the economic structure from the production base to the market; establishing the regional market institution and encouraging innovative activities. With the transformation of regional structure, new regionalism in East Asia will arise in the future.

\* I owe deep thanks to Prof. Hugh Patrick, School of Business, Columbia University, who gave me a lot of help and concerns and also to the Ford Foundation to finance me and to provide me with the opportunity of staying in U.S. for one year.

[1] Walter Mattli, "The Logic of Regional Integration: Europe and Beyond", Cambridge University Press, 1999.

[2] Fishlow and Haggard thought that 'Regionalization' and 'Regionalism' is used to describe the regional economic integration and regional politic integration respectively. The former refers to the regional concentration of economic flows while the latter is defined as a political process characterized by economic policy cooperation and coordination among countries. Söderbaum thought that the concept of regionalism can refer to the general phenomenon, denoting formal projects and regional processes. It also represents the body of ideas, values and concrete objectives. 'Regionalization' denotes the (empirical) process that leads to patterns of cooperation, integration, complementary and identity within a particular cross-national geographical space. Hettne argued that the process of regionalization depicts a multidimensional process of intraregional change that occurs simultaneously at several levels of social, political and economic interaction.

Fishlow, Albert and Stephan Haggard, 'The United States and the Regionalization of the World Economy', Paris: OECD Development Center Research Project on Globalization and Regionalization, 1992. Fredrik Söderbaum, 'Rethinking the New Regionalism', Paper for the XIII Nordic Political Science Association meeting, Aalborg 15-17 August, 2002, Workshop session 23: Regions and regionalization. B. Hettne, 'Globalization and the New Regionalism: The Second Great Transformation', in: B. Hettne, A. Sapir, O. Sunkel (eds.), "Globalism and the New Regionalism," New York, St. Martin's Press, 1999.

[3] Hettne points out that the old regionalism was created from above by the superpowers, the new is a more spontaneous process from within the region and also "from below," by the constituent states themselves, but increasingly also other actors, are the main proponents for regional integration. In the case of old regionalism, as far as economic integration is concerned, is it inward protectionist, the new is described as "open" and thus compatible with an interdependent world economy. The old was specific with regard to objectives, while the new is more comprehensive and multi-mentional oriented. The old only concern relations between formally sovereign states while the new forms part of a global structural transformation in with non-state actors are active and manifest themselves at several levels of the global system. Bjorn Hettne, "Globalization and the New Regionalism: the Second Great and the New Regionalism," St. Martin's Press, 1999.

[4] [www.wto.org](http://www.wto.org)

[5] Wilfred J. Ethier, "The New Regionalism", the Economic Journal, Vol.108, No.449, Jul., 1998, pp 1149-1161.

[6] Yoshinobu Yamamoto, "Regionalization in Contemporary International Relations", in Van R. Whiting, Edited, "Regionalization in the world Economy: NAFTA, the Americas and Asia Pacific", Macmillan India Ltd, 1996.

[7] Bjorn Hettne, "Globalization and the New Regionalism: the Second Great and the New Regionalism," St. Martin's Press, 1999.

[8] Estimates of the TNCs and Management Division, UNCTAD.

[9] C. Fred Bergsten & Robert O. Keohane; Joseph S. Nye, "International Economics and International Politics: A Framework for Analysis", International Organization, Vol.29, No.1, World Politics and International Economics, Winter, 1975, pp 3-36.

[10] J.S. Nye, "Multinational Enterprises and Prospects for Regional and Global Political Integration," annuals of the American Academy of Political and Social Science, Vol. 403, The Multinational Corporation, Sep, 1972, pp 116-126.

[11] Jonathan F. Galloway, "Worldwide Corporations and International Integration: The Case of INTELSAT", International Organization, Vol.24, No.3, Summer, 1970, pp 503-519. Also see J.J. Servan-Schreiber, "The American Challenge", translated by Ronald Steel, New York: Atheneum, 1968, p11.

[12] Geoffrey Jones, "The Evolution of International Business. An Introduction," London: Routledge, 1996.

- [13] Winfried Ruigrok, "International Corporate Strategies and Restructuring," in Richard Stubbs and Geoffrey R.D. Underhill, edited, "Political Economy and the Changing Global Order," Oxford University Press, 2000, pp320-31.
- [14] Jonathan F. Galloway, "Worldwide Corporations and International Integration: The Case of INTELSAT", International Organization, Vol.24, No.3 Summer, 1970, 503-519. Also see Anthony Sampson, "Anatomy of Europe: A Guide to the workings Institutions and Character of Contemporary Western Europe," New York: Harper & Row, 1968, p.84.
- [15] Susan Strange, "The Retreat of the State, the Diffusion of Power in the World Economy," Cambridge University Press, 1996.
- [16] Kenichi Ohmae, "the Borderless World: Power and strategy in the International Economy," Mckinsey&company, Inc., 1990
- [17] Higgott, et al edited, "Non- State Actors and Authority in the Global System," London: Routledge, 2000, pp. 1-12. A Claire Cutler, et al, ed, "Private Authority and International Affairs," State University of New York Press, 1999. Martin Hewson and Timothy Sinclair, "Global Governance," State of New York University Press, 1999.
- [18] Winfried Ruigrok, "International Corporate Strategies and Restructuring," in Richard Stubbs and Geoffrey R.D. Underhill, ed., "Political Economy and the Changing Global Order," Oxford University Press, 2000, pp320-31.
- [19] Jonathan F. Galloway, "Worldwide Corporations and International Integration: The Case of INTELSAT", International Organization, Vol.24, No.3 Summer, 1970, pp503-519. Also see Paul Smoker, "International process simulation: a man computer model," Northwestern University, 1969.
- [20] G. Modelski, "The Corporation in World Society," in George W. Keeton and Georg Schwenzenberger, ed., "Yearbook of World affairs," London, 1968, p78.
- [21] Robert E.Lawrence, "on the Difference between Regionalism in the 1930s and in the Contemporary era," Washington, D.C.:Brookings Institution, 1996.6.
- [22] Peter Robson, "Transnational Corporations and regional integration," in The economics of international integration, Peter Robson, ed., Routledge press, the forth edition, 1998.
- [23] Charles Kindleberger, "European Integration and the Integration Corporation", in Courtney Brown, ed., World Business, New York: Macmillan, 1970, pp99-113.
- [24] Carlos Diaz Alejandro, "Direct Foreign Investment in Latin America," in Charles P. Kindleberger, "the International Corporation," MIT press, 1971.
- [25] J.S. Nye, "Multinational Enterprises and Prospects for Regional and Global Political Integration," annuals of the American Academy of Political and Social Science, Vol. 403, The Multinational Corporation, Sep., 1972, pp116-126.
- [26] Winfried Ruigrok and Rob Van Tulder, "The Logic of International Restructuring," London: Routledge, 1995.
- [27] Winfried Ruigrok and Rob Van Tulder, "The Logic of International Restructuring," London: Routledge, 1995.
- [28] Philip G. Cerny, "Restructuring the Political Arena: Globalization and Paradoxes of the Competition State." In: Randall D. Germain, ed. "Globalization and Its Critics: Perspectives from Political Economy," London: Macmillan, 2000, pp 117-38.
- [29] Walter Mattli, "The logic of Regional Integration: Europe and Beyond", Cambridge University Press.
- [30] Sidney Weintraub, "The Meaning of NAFTA Seen from the United States," 1996, in Van Whiting, ed., "Regionalization in the World Economy: NAFTA, the Americas and Asia Pacific," Macmillan India Ltd., 1999.
- [31] A Claire Cutler, et al, ed, "Private Authority and International Affairs," State University of New York Press, 1999.
- [32] Including the National Association of Manufacturers, the National Retail Federation, The business Roundtable, and the United States Council for International Business.
- [33] Stephan Haggard, "developing Nations and the Politics of Global Integration," Washington, D.C.: Brookings Institution, 1995, p90.
- [34] Shujiro Urata, "A shift from Market-led to institution-led Regional Economic integration in East Asia." Paper presented at the conference on Asian Economic Integration organized by RIETI, Tokyo, April 22-23, 2002.

- [35] Wayne Sandholtz and John Zysman, "1992: Recasting the European Bargain," *World Politics*, Oct. 1989, pp95-128.
- [36] Quoted in Maria Green Cowles, "Setting the Agenda for a new Europe: The ERT and EC 1992," *Journal of Common Market Studies* 33, Dec. 1995, p506.
- [37] Stephen Thomsen, "Regional Integration and Multinational production", in Vincent Cable and David Henderson, edited, "Trade Blocs? The future of regional Integration," Royal Institute of International Affairs, 1994.
- [38] Helen Milner, "Resisting Protectionism: Global Industries and the Politics of International Trade", Princeton University Press, 1988.
- [39] Arye L Hillman and Heinrich W. Ursprung, "Multinational Firms, Political Competition, and International Trade Policy," *International Economics Review*, Vol. 34, No.2, May, 1993, pp347-363.
- [40] Features include: •technology and knowledge transfers, and technology diffusion, especially from developed countries to developing countries, that increase productivity, • dynamic comparative advantage and "learning by doing" efficiency gains through increased demand from expanded trade, •elimination of wasteful rent seeking activities through trade liberalization, •pro-competitive gains from increasing import competition in an environment of imperfect competition, allowing exploitation of political economies of scale in production, • increased geographical dispersion of production through trade that supports (1) exploitation of different factor proportions for parts of the production process(Richard efficiency gains) and /or (2) local economies of scale through finer specialization and division of labour in production(Smithian efficiency gains), • increased foreign direct investment that carries with it advanced technologies and hence increases in productivity, • "challenge-response" increases in efficiency through increased competition due to expanded involvement in world markets, and • Schumpeterian innovation and "creative destruction" induced by increased competition arising from expanded trade. Mary E. Burfisher, Sherman Robinson, and Karen Thierfelder, "Regionalism: Old and New, Theory and Practice", MTID Discussion Paper NO. 65. Feb., 2004. [http:// www. lfpri.org](http://www.lfpri.org).
- [41] Peter Robson, "Transnational Corporations and Regional Integration," in *The economics of international integration*, Peter Robson, ed., Routledge press, fourth edition 1998.
- [42] Helen Milner and David Yoffie, "Between Free Trade and Protectionism: Strategic Trade Policy and a Theory of Corporate Trade Demands," *International Organization*, vol. 43, no.2, Spring 1989.
- [43] Dilip K. Das, "Regional Trading Agreements and the Global Economy: an Asia-Pacific Perspective", Feb., 2001, <http://www2.cid.harvard.edu/cidtrade/issues/das4>.
- [44] A Claire Cutler, et al, ed, "Private Authority and International Affairs," State University of New York Press, 1999.
- [45] Wilfred J. Ethier, "The New Regionalism," *The Economic Journal*, Vol.108, No.449, Jul., 1998, pp1149-1161.
- [46] Mary E. Burfisher, Sherman Robinson, and Karen Thierfelder, "Regionalism: Old and New, Theory and Practice", MTID Discussion Paper No. 65. Feb., 2004. [http:// www. lfpri.org](http://www.lfpri.org).
- [47] Tsoukalis, "the New European Economy: The Politics and Economics of Integration," Oxford University Press, 1993.
- [48] Manuela Spindler, "New Regionalism and the Construction of Global Order", CSGR Working Paper, No.93/02, March 2002.
- [49] Ignatius J. Jorstmann and James R. Markusen, "Firm-Specific Assets and the Gains from Direct Foreign Investment," *Economics, New Series*, Vol. 56, No.221, Feb., 1989, pp41-48.
- [50] John Dunning, "Explaining the International Direct Investment Position of Countries: towards a Dynamic or Developmental Approach," *Weltwirtschaftliches Archiv*, 117, 1981, pp30-64.
- [51] John Dunning, "Trade, Location of Economic Activity and the Multinational Enterprise: Some Empirical Tests," *Journal Business studies*, vol.11, no.1, spring/summer 1980, pp9-31.
- [52] James R. Markusen, "The Boundaries of Multinational Enterprises and the Theory of International Trade," *The Journal of Economic Perspectives*, Vol.9, No.2, Spring, 1985, 169-189.
- [53] James R. Markusen, "The Boundaries of Multinational Enterprises and the Theory of International Trade," *The Journal of Economic Perspectives*, Vol.9, No.2, Spring, 1985, 169-189.
- [54] James R. Markusen, "The Boundaries of Multinational Enterprises and the Theory of International Trade," *The Journal of Economic Perspectives*, Vol.9, No.2, Spring, 1985, 169-189

- [55] Ignatius J. Jorstmann; James R. Markusen, "Firm-Specific Assets and the Gains from Direct Foreign Investment", *Economics, New Series*, Vol. 56, No.221, Feb., 1989, pp41-48
- [56] David J. Teece, "The Market for Know-How and the Efficient International Transfer of Technology", *Annals of the American Academy of Political and Social Science*, Vol. 458, Technology Transfer, New Series, New Analysis, Nov., 1981, pp81-96.
- [57] Mohammad Yamin, "A Critical Re-evaluation of Hymer's contribution to the Theory of the Transnational Corporation", in Christos N. Pitelis and Roger Sugden, edited, "The Nature of the Transnational Firm," Routledge press, 1999.
- [58] Robert L.A. Morsink, "Foreign Direct Investment and Corporate Networking: A framework for Spatial Analysis of Investment Conditions," Edward Elgar, 1998.
- [59] The origins of the theory of internalization can be traced to Coase(1937) and Hymer(1976). For further discussion and analysis refer to Buckley and Casson (1976), Rugman (1981), Teece(1981) and (1985), Caves (1982), Hermart(1986) and Buckley(1988).
- [60] Yarbrough and Yarbrough, "Cooperation and Governance in International Trade", in Farok Contractor and peter Lorange, ed., "Cooperative Strategies in International Business: Joint Ventures and Technology Partnerships between Firms," Lexington Books, 1988.
- [61] Susan K. Sell, "Intellectual Property Protection and Antitrust in the Developing World: Crisis, Coercion, and Choice," *International Organization*, Vol.49, No.2, Spring, 1995, pp315-349.
- [62] Edwin Mansfield and Anthony Romeo, "Technology Transfer to Overseas Subsidiaries by U.S.-Based firms," Research Paper, University of Pennsylvania, 1979.
- [63] Williamson, "the Economic Institutions of Capitalism," New York, Free Press, 1985, p163.
- [64] Nagesh Kumar, "Globalization, FDI and Technology Transfers: Impact on and Prospects for Developing Countries," Routledge, 1998.
- [65] C.May, "A Global Political Economy of Intellectual Property Rights: The New Enclosures?" London, Routledge, 2000, pp.82-4; S.Sell, Private Power, "Public Law: the Globalization of Intellectual Property Rights," Cambridge University Press, 2003, ch.5.
- [66] M.Scott Taylor, "TRIPs, Trade and Growth", *International Economic Review*, Vol. 35, No.2, May, 1994, pp361-381.
- [67] Jeong-Yeon Lee and Edwin Mansfield, "Intellectual Property Protection and U.S. Foreign Direct Investment," *The Review of Economics and Statistics*, Vol. 78, No.2 May, 1996, pp181-186
- [68] Chin and Grossman, "Intellectual Property Rights and North-South Trade," nber working paper, no. 2769, 1988.
- [69] R. Stephen Richardson and James D. Gaisford, "North-South Disputes over the Protection of Intellectual Property," *The Canadian Journal of Economics*, Vol. 29, Special Issue: Part 2, Apr., 1996, S376-S381.
- [70] Yong Yang, "Why Do Southern Countries Have Little Incentive to Protect Northern Intellectual Property Rights?" *The Canadian Journal of Economic*, Vol.31, No.4, Oct., 1998, pp800-816.
- [71] Susan K. Sell, "Intellectual Property Protection and Antitrust in the Developing World: Crisis, Coercion, and Choice," *International Organization*, Vol.49, No.2, Spring, 1995, pp315-349
- [72] W. Andrew Axline, "Underdevelopment, Dependence, and Integration: The Politics of Regionalism in the Third World," *International Organization*, Vol. 31, No.1, Winter, 1977, pp83-105.
- [73] Krishna Kumar, "Third World Multinationals: A Growing Force in International Relations", *International Studies Quarterly*, Vol. 26, No. 3, Sep., 1982, pp397-424.
- [74] Among the most active groups were the Associations of: the Pharmaceutical Manufacturers, the chemical Manufacturers; the semiconductor industry, and the international IP Alliance.
- [75] Razeen Sally, "States and Firms: Multinational Enterprises in Institutional Competition," Routledge, 1995, pp203.
- [76] Lawrence, "Regionalism, Multilateralism, and deeper integration," pp91-92.
- [77] The CEOs involved are leading industrialists of global operating firms such as Unilever, TotalFinaElf, Thyssenkrupp, and so on. Citigroup, TotalFinaELf, General Motors, Shell, HSBC, Mitsubishi Corp., AIG, Hyundai, Samsung, Fujitsu, Goldman Sachs, Allianz, or McDonalds are active in the AsiaPacific. Their CEOs and Chairmen met and discussed intensively the political-economic conditions found for their businesses before APEC leaders meet annually.

- [78] Lance Davis and Douglass North, "Institutional change and American Economic Growth," Cambridge University press, 1971, p59.
- [79] Harold Demsetz, "Towards a Theory of Property Rights," American Economic Review-Paper and Proceedings 57, May 1969, p350.
- [80] permitting inventors to earn monopoly profits on their inventions and thus stimulating inventive activity and distorting consumer choice by monopoly pricing.
- [81] Alan V. Deardorff, "Welfare Effects of Global Patent Protection," *Economica*, New Series, Vol.59, 233, Feb., 1992, pp35-51.
- [82] Yong Yang, "Why Do Southern Countries Have Little Incentive to Protect Northern Intellectual Property Rights?" *The Canadian Journal of Economic*, Vol.31, No.4, Oct., 1998, pp800-816.
- [83] Susan K. Sell, "Intellectual Property Protection and Antitrust in the Developing World: Crisis, Coercion, and Choice," *International Organization*, Vol.49, No.2, Spring, 1995, pp315-349.
- [84] Eisuke Sakakibara and Sharon Yamakawa, "Market-Driven Regional Integration in East Asia," paper prepared for the workshops on "Regional Economic Integration in a Global Framework," sponsored by the European Central Bank and the People's Bank of China to be held on Sep., 22-23 2004 in China.
- [85] Susan K. Sell, "Intellectual Property Protection and Antitrust in the developing World: Crisis, Coercion, and Choice," *International Organization*, Vol.49, No.2, Spring, 1995, pp 315-349.
- [86] Chia distinguishes between regionalization and regionalism. Regionalization refers to the increase in economic interdependence that takes place as the result of increased intraregional trade, investment, technology, and migration flows, without any formal framework of cooperation. It is often termed market-driven integration because it occurs as each economy undertakes its own unilateral process of opening up, as well as fulfilling its multilateral commitments. Regionalism refers to formal economic cooperation and economic integration arrangements, and agreements between two or more countries that are designed to achieve economic growth through trade and investment liberalization and facilitation. Chia Siow Yue, "ASEAN and Emerging East Asia Regionalism," Paper presented at the ADB 35<sup>th</sup> Annual Meeting Seminar on Towards Asian Integration: the Role of Regional Cooperation, Shanghai, May 2002.
- [87] Prema-chandra Athukorala, "Product Fragmentation and Trade Patterns in East Asia," Working Paper No. 2003/21, Australian National University, 2003. in Michael Borrus, Dieter Ernst, and Stephan Haggard, ed., "International Production Networks in Asia: Rivalry or Riches?" London and New York: Routledge, 2000.
- [88] MNCs are attributed with initiating the phenomenon of cross-border production networks through their establishment of subsidiaries in other countries to handle certain stages of production. MNCs organize the entire range of its business activities from R&D, product definition and design, to supply of inputs, manufacturing (or production of a service), distribution, and support services. The entire network of cross-border relationships is established between not only MNCs and their own affiliates and subsidiaries, but also their subcontractors, suppliers, service providers, or other firms, participating in cooperative relationships, such as standard setting or R&D analysis. See Prema-chandra Athukorala, "Product Fragmentation and Trade Patterns in East Asia," Working Paper No. 2003/21, Australian National University, 2003. in Michael Borrus, Dieter Ernst, and Stephan Haggard, ed., "International Production Networks in Asia: Rivalry or Riches?" London and New York: Routledge, 2000.
- [89] Shujiro Urata, "A shift from Market-led to institution-led Regional Economic integration in East Asia." Paper presented at the conference on Asian Economic Integration organized by RIETI, Tokyo, April 22-23, 2002.
- [90] Takeshi Aoki, "Japanese FDI and the Forming of Networks in the Asia-Pacific Region: Experience in Malaysia and Its Implications," in Shojiro Tokunaga, ed., "Japan's Foreign Investment and Asian Economic Interdependence: Production, Trade and Financial Systems," University of Tokyo Press, 1992.
- [91] Wendy Dobson, "Business networks in East Asia: Diversity and evolution," in Rong-I Wu and Yun-Peng Chu, ed., "Markets and Government in the Asia Pacific: Competition Policy, Convergence and Pluralism," Routledge publishing, 1998.
- [92] Murray Weidenbaum, "Greater China: A New Economic Colossus?" *Washington Quarterly* 16 1993, pp71-81.

- [93] Dajin Peng, "Ethnic Chinese Business Networks and The Asia-Pacific Economic Integration," *Journal of Asian and African Studies*, Vol.35, 12., May 2000.
- [94] Shujiro Urata, "A shift from Market-led to institution-led Regional Economic integration in East Asia." Paper presented at the conference on Asian Economic Integration organized by RIETI, Tokyo, April 22-23, 2002.
- [95] Richard Stubbs, "Asia-Pacific Regionalization and The Global Economy: A third Form of Capitalism?" *Asian Survey*, Vol. 35, No.9, Sep., 1995, pp785-797.
- [96] Harald Sander, "Deep Integration, Shallow regionalism, and Strategic Openness: Three Notes on Economic Integration in East Asia.", in Franz Peter Lang, edited, "International Economic Integration", Physica-Verlag, 1995.
- [97] Yamauchi Ichizo, *Kaden (Consumer electronics)*, Nihon Keizai Shinbunsha, 1990.
- [98] Roger Hayter and David W. Edgington, "Flying Geese In Asia: The Impacts of Japanese MNCs as A Source of Industrial Learning," *Tijdschrift Economische en Sociale Geografie*, Vol.95, NO.1, 2004, pp3-26.
- [99] John Dunning, "The Eclectic Paradigm of International Production: a Restatement and some Possible Extensions," *Journal of international business studies*, vol.19, no.1, 1988, pp1-31.
- [100] Katz, J. "Domestic Technological Innovations and Dynamic Comparative Advantage," *Journal of Development Economics*, Vol. 16, No.1, 1984, pp13-37.
- [101] Jin W. Cyhn, "Technology Transfer and International Production: the Development of the Electronics Industry in Korea," Edward Elgar, 2002.
- [102] OECD, *Annual Report*, 1989, Paris.
- [103] Alice Amsden, "Asia's Next Giant: South Korea and Late Industrialization", Oxford University Press, 1989.
- [104] Mitchell Bernard and John Ravenhill, "Beyond Product Cycles and Flying Geese: Regionalization, Hierarchy, and the Industrialization," *World Politics*, Vol.47, No.2, Jan., 1995, pp171-209
- [105] Luis Suarez-Villa and Pyo-Hwan Han, "The Rise of Korea's Electronics Industry: Technological Change, Growth, and Territorial Distribution," *Economic Geography*, Vol. 66, No.3, Jul., 1990, pp273-292
- [106] Mitchell Bernard and John Ravenhill, "Beyond Product Cycles and Flying Geese: Regionalization, Hierarchy, and the Industrialization," *World Politics*, Vol.47, No.2, Jan., 1995, 171-209.
- [107] Hobday, "the electronics industries," *15.5 Electronic Business Asia*, sep., 2000.
- [108] Lai Yew Wah and Suresh Narayanan, "the Quest for Technological Competence via MNCs: a Malaysian Case Study," *Asian Economic Journal*, vol. 11 No.4, 1997.
- [109] Robert E. Lipsey, "Affiliates of U.S. and Japanese Multinationals in East Asian Production and Trade," NBER working paper 7292.
- [110] these are subcontracting or original equipment manufacture linkages between final producers and providers of components, materials, parts, software, and sub-assemblies.
- [111] Peter Dicken and Henry Wai-chung Yeung, "Investing in the Future: East and Southeast Asian Firms in the Global Economy," in Kris Olds and Peter Dicken, ed., "Globalization and the Asia-Pacific: Contested Territories," Routledge, 1999.
- [112] Susan M. Collins, Barry P. Bosworth and Dani Rodrik, "Economic Growth in East Asia: Accumulation verse Assimilation," *Brookings Papers on Economic Activity*, Vol. 1996, No.2, 1996, pp135-203.
- [113] George A. Zaphiriou, "Transnational Technology Protection", the *American Journal of Comparative Law*, Vol. 40, No.4, Autumn, 1992, pp 879-915.
- [114] Ippei Yamazawa, "Economic Integration in the Asia Pacific Region: A Japanese View", in Van Whiting, ed., "Regionalization in the World Economy: NAFTA, the Americas and Asia Pacific," Macmillan India Ltd., 1999.
- [115] Powl Evan, "Asia's New Regionalism: Implications for Canada", *Foreign Policy Dialogue Series*, University of British Columbia, 2003-3.
- [116] Shee Poon Kim, "East Asian New Regionalism: Toward Economic Integration?" *Ritsumeikan International Affairs* Vol.1, 2003, pp.57-87.
- [117] Jin W. Cyhn, "Technology Transfer and International Production: the Development of the Electronics Industry in Korea," Edward Elgar, 2002.

[118] Paul Liu, "A Review of intellectual Property Laws in Taiwan: Proposals to Curb Piracy and Counterfeiting in a Developing Country," Brigham Young University Law Review Vol. 5, No.3, 1988.